

Anton Romanov

SOFTWARE DEVELOPMENT ENGINEER

theli-ua | antonromanov

Summary

VERSATILIST SENIOR SOFTWARE ENGINEER WITH EXPERTISE IN CLOUD, SECURITY, AND DISTRIBUTED SYSTEMS

A versatile Senior Software Engineer with over 20 years of experience, specializing in cloud computing, distributed systems, and software security. Currently a Senior Software Development Engineer at Amazon Web Services (AWS), where I lead multiple initiatives for DynamoDB, with a focus on a new storage engine, while also contributing to core services like a distributed journal. My work spans across enhancing security, performance, and scalability, ensuring that AWS services meet the highest standards of efficiency. Demonstrated the ability to excel across various technologies and roles at companies such as Google and Samsung Electronics.

KEY STRENGTHS

- Experience in kernel development, low-level programming, and system performance optimization
- Expertise in cloud infrastructure and distributed systems
- Proficient in a wide range of programming languages using right tool for the right job
- Proven leadership in driving cross-functional projects, mentoring teams, and delivering complex technical solutions
- Ability to quickly adapt to and master new technologies, demonstrating a versatile skill set across multiple domains

Work Experience

Amazon Web Services (AWS)

Greater Seattle Area, USA

SENIOR SOFTWARE DEVELOPMENT ENGINEER

Jun. 2022 - Present

- Developed and enhanced new DynamoDB storage engine
- We built some very cool replication technology that backs both DynamoDB Strongly Consistent Global Tables and Aurora DSQL's multi-region mode.
- Mentored teams on Rust programming and guided efforts to adopt new methodologies for software development.

Google

USA

SENIOR SOFTWARE ENGINEER

Nov. 2021 - Jun. 2022

- Worked on ChromeOS core virtualization technologies. Mostly crosvm - ChromeOS's VMM
- Open source Linux Kernel contributions to support ChromeOS virtualization solutions

Amazon, Project Kuiper

Greater Seattle Area, USA

SENIOR SOFTWARE ENGINEER

Nov. 2020 - Nov. 2021

- Owned the customer terminal dataplane, enhancing functionality and performance.
- Developed bootrom for a custom Project Kuiper ASIC
- Worked on automated processes to simplify collaboration between hardware design and software teams
- Introduced the team to Rust programming and contributed to cross-functional projects outside of SDN area.

Amazon Web Services (AWS), DynamoDB

Greater Seattle Area, USA

SOFTWARE DEVELOPMENT ENGINEER

Apr. 2017 - Oct. 2020

- Led multiple projects to improve encryption, storage costs, and performance in a storage engine layer
- Designed and implemented algorithms for distributed admission control

Amazon Web Services (AWS), Edge Services

Greater Seattle Area, USA

SOFTWARE DEVELOPMENT ENGINEER

Oct. 2013 - Apr. 2017

- Designed and delivered multiple features in internal DPDK-based AntiDDoS complex
- Contributed to the development of AWS Shield and Anti-DDoS solutions.

Samsung Electronics Ukraine R&D

Kyiv, Ukraine

SENIOR ENGINEER, PROJECT LEAD

Feb. 2011 - Sep. 2013

- Led research and development of security and middleware solutions for Samsung Electronics products.
- Developed and optimized embedded software for ARM-based systems using C/C++ and NEON.

ЛІГА

SOFTWARE ENGINEER

Kyiv, Ukraine
Sep. 2007 - Feb. 2011

- Developed and optimized software for Digital Rights Management (DRM) systems.
- Worked on natural language processing (NLP) projects to improve data analysis capabilities.
- Enhanced big data processing pipelines and implemented performance optimizations.

UkrCard JSC

SYSTEMS/SOFTWARE ENGINEER

Kyiv, Ukraine
Jul. 2006 - Aug. 2007

- Developed cryptographic solutions and internal tools for secure financial transactions.
- Worked with HP NonStop Tandem Computers (Guardian/OSS) to ensure reliable systems performance.
- Implemented secure processing solutions using HP Atalla Network Security Processor.

Information Center for Personal Accounting System of Pension Fund of Ukraine

SOFTWARE APPLICATION ENGINEER

Ukraine
2004 - 2006

- Developed software solutions using Oracle PL-SQL
- Programmed in Delphi and C/C++ for both Windows and Linux platforms.
- Streamlined processes for personal accounting systems to enhance operational efficiency.

Education

NTUU "KPI" (National Technical University of Ukraine)

M.S. IN INFORMATION SECURITY IN COMPUTER SYSTEMS AND NETWORKS

Kyiv, Ukraine
2004 - 2006

NTUU "KPI" (National Technical University of Ukraine)

B.S. IN INFORMATION TECHNOLOGIES

Kyiv, Ukraine
2000 - 2004